

The

North Queensland Naturalist

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NORTH QUEENSLAND NATURALISTS' CLUB

Meets at Girls and Infants' School, Abbott Street, Cairns, usually on the 1st Monday in each month, at 8 p.m.

BUSINESS FOR THE MEETING, MONDAY, 11th MARCH, 1940:—

Lecturè by M. White, of Cairns, on "Our Tropical Fish as Observed in Aquarium Specimens."

11th December, 1939:

Lecture by Mr. Noel M. Ferguson, F.I.O.Q., "Man's Uses of Natural Deposits."

New Member Elected:

Mr. Sydney J. Ward, Monamona Mission.

14th February, 1940:

Lecture by Mr. F. Aland on "Fish."

New Member Elected:

Mr. Gilbert P. Whitley, F.R.Z.S., Ichthyologist to Australian Museum, Sydney.

DRYOPIDAE IN NORTH QUEENSLAND.

By J. G. BROOKS, B.D.Sc., L.D.Q., F.R.E.S., Cairns.

Dryopidae are small dull-coloured aquatic or semi-aquatic beetles found on rocks or logs in fast running streams. They are collected by taking the rocks and logs from the streams and allowing the water to dry off. Shortly, small beetles will be noticed moving and are easily collected by means of a small brush dipped in alcohol.

and E. H. Zeck re-classified this family, few specimens were known in Australia. In 1929, Mr. Wassel, who had been with H. J. Carter in New South Wales, led the first organised collecting party to the Pine River, South Queensland. Mr. H. Hacker, F.R.E.S. (Queensland Museum), Mr. F. A. Perkins, B.Sc.Agr. (Queensland University), and the writer saw and collected their first specimens of

Until H. J. Carter, B.A., F.R.E.S.,

this little-known family. On this trip, some of us wore swimming togs and dived to different depths for logs, but the writer has since found that the shallower and fast running creeks produce far better results than the deep and more slowly running streams.

It is the opinion of the writer that the reason for the distribution is that small fish can easily contend with a slowly running stream and both the beetles and their larvae prove easily obtainable food for the fish, whereas in the fast running portions of creeks, the fish cannot compete with the current, so the beetles are undisturbed.

In North Queensland, the writer has obtained more species and greater numbers of *Dryopidae* on the Ather-ton Tableland, (particularly at Ravenshoe and Millaa Millaa) than on the coast. No specimens have yet been secured from the Mossman River, Barron River (Cairns), Fishery Creek, Babinda Creek or Russell River. Freshwater Creek and Little Mulgrave River both produced a species new to science (*Simsonia brooksi*, Cart. et Zeck). All the Tableland rivers and creeks which have been examined have produced results. These include Barron River and Emerald Creek

(Mareeba), Millstream River, Vine, Dinner and Massey Creeks (Ravenshoe) and branches of the Beatrice River (Millaa Millaa). To date, one new species (*Notriolus tropicus*, Cart. et Zeck) has been discovered on the Tablelands by the writer, and *Stetholus elongatus*, Cart. et Zeck has its first Queensland recording from the Ravenshoe district.

The following is a list of North Queensland *Dryopidae* collected by the writer and determined by H. J. Carter, B.A., F.R.E.S.

- Hydrethus leai*, Cart.
- Stenelmis pallidipes*, Cart.
- Kingolus cupreus*, Cart.
- Kingolus metallicus*, King.
- Simsonia brooksi*, Cart. et Zeck.
- Simsonia purpurea*, Cart.
- Notriolus subplanatus*, Cart. et Zeck.
- Notriolus taylori*, Cart. et Zeck.
- Notriolus tropicus*, Cart. et Zeck.
- Stetholus elongatus*, Cart. et Zeck.

Mr. L. Wassel has collected a new species, *Notriolus minutus*, Cart. et Zeck, from Coen.

It is the opinion of the writer that there are many varieties of *Dryopidae* still to be recorded from North Queensland.



Copyright.

Pseudocheirus herbertensis,
Collett, 1887.

Subsp. *herbertensis*,
Waite, 1899.

Evelyn,
North Queensland.

Photographs by
Herbert V. Chargois,
F.R.P.S., F.R.S.A.

13/2/1939.

LIFE HISTORY OF ANTHERAEA JANETTA.

By R. L. HUNTER.

Although in a previous issue of the North Queensland Naturalist, Vol. VII, no. 58, June, 1939, p. 4, this moth (illustrated by a plate) was referred to as *Copaxa janetta*, Dr. Jeffreys Turner has since definitely assured the writer that it should be designated by the older name of *Antheraea janetta*. It belongs to the great family of Saturniidae.

The life history of this moth, although it has been described before, is very interesting, firstly, because of the great variety of food plants which the larvae feed on, for example, not only the exotic species of all Citrus plants and the guava, *Psidium guajava*, but also many native plants such as *Careya australis* (cocky apple), *Evodia Elleryana*, besides many others, and secondly, for the great variations in colour of the moths, the males being far more variable than the female.

The eggs are attached in sets up to seven on the under surface of the leaf of the food plant, and when the small larva emerges it is greenish white and hairy with pale stripes along the sides. It grows very rapidly into a large green caterpillar with white stripes along its whole length, and on each segment are tubercles from

which numerous spines project.

At times the caterpillars become so numerous that they completely defoliate the trees of their food plant and many cocoons are to be gathered from which only parasitic flies and wasps have emerged. Few other larvae appear to be attacked so readily as those of the *Antheraea* moths.

When pupating, an operation which usually takes place on the food plant, it gathers a few leaves around it, forming a pale silk cocoon, which is very tough and it seems remarkable that a moth should be able to emerge from it. However, when the insect is ready to emerge, it cuts its way through the cocoon by a rotatory movement with the aid of the knife-like edges on the wings.

The male moth is usually smaller than the female, the tips of the wings being more pointed. The colour can be almost any shade between a pale cream to deep chocolate, leaving eye spots on top and underwings, although in the latter it is reduced to a mere dot. The general colour, however, is yellow. The female is not nearly so variable, and the common colour is usually a deep orange, the eye spots about six inches across the wings.